

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

The Claims:

1. **(Currently Amended)** A method comprising:
receiving, from a first processor at a second processor, ~~an intermediate~~ a coarse scaled image matrix having a coarse scaling ratio $1/X$ as compared to an original image matrix, and
fine scaling, by the second processor, the ~~intermediate~~ coarse scaled image matrix by using a ratio Y/Z to create a final image matrix ~~image~~ having a scaling ratio R as compared to the original image matrix;
where X , Y , and Z are non-zero integers,
 $Y < Z$,
the scaling ratio R corresponds approximately to an equation $Y/(Z*X)$, and
coarse scaling is simpler than fine scaling.
2. **(Currently Amended)** A method according to Claim 1, wherein the fine scaling is performed, after ~~the first~~ a coarse scaling, to a pixel group calculated for the ~~intermediate~~ coarse scaled image matrix, without completing the calculation of the entire ~~intermediate~~ coarse scaled image matrix.
3. **(Previously Presented)** A method according to Claim 1, further comprising selecting the integer X to be as great as possible, according to the integers maximums selected for Y and Z and the selected scaling ratio R .
4. **(Previously Presented)** A method according to Claim 1, further comprising selecting the integer X to be the greatest possible power of two according to the scaling ratio R .
5. **(Previously Presented)** A method according to Claim 1, further comprising selecting X , Y and Z so that $1/X$ is approximately Y/Z .

6. **(Currently Amended)** An apparatus comprising:
memory areas configured to store an original digital image matrix ~~image~~ to be scaled, for data to be processed, and configured to store an output image matrix, and
a central processing unit configured to process the original image matrix ~~image~~ in two stages by a selected scaling ratio R, in ~~[[the]]~~ a first stage of the two stages the original image matrix is coarse scaled, by a first processor, by using a ratio $1/X$ to create pixels of ~~the~~ intermediate a coarse scaled image matrix, and in ~~[[the]]~~ a second stage of the two stages each pixel of the ~~intermediate~~ coarse scaled image matrix is fine scaled, by a second processor, by using a ratio Y/Z , and wherein an equation $Y/(Z*X)$ corresponds approximately to a scaling ratio R and wherein $Y < Z$, and
where coarse scaling is simpler than fine scaling.
7. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is integrated in connection with the image sensor of a camera.
8. (Previously Presented) An apparatus according to Claim 7, wherein the apparatus incorporates a host system and the first processor is integrated in connection with the image sensor of a camera and the second processor is integrated in the host system.
9. (Canceled).
10. **(Currently Amended)** An apparatus according to Claim 6, wherein the apparatus includes a memory for ~~[[the]]~~ a scaling function of at most 4 image-sensor lines for each color component.
11. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is fitted to a mobile station.
12. **(Currently Amended)** A computer-readable memory having software stored thereon and the software when executed by a central processing unit performs:

receiving ~~an intermediate~~ a coarse scaled image matrix having a coarse scaling ratio $1/X$ as compared to an original image matrix, and

fine scaling the ~~intermediate~~ coarse scaled image matrix by using a ratio Y/Z to create a final image matrix having a scaling ratio R as compared to the original image matrix;

where X , Y , and Z are non-zero integers,

$Y < Z$,

the scaling ratio R corresponds approximately to an equation $Y/(Z*X)$, and

coarse scaling is simpler than fine scaling.

13. **(Currently Amended)** A method according to Claim 1, further comprising displaying an image corresponding to the first, coarse scaling coarse scaled image matrix in an analog form.

14. **(Currently Amended)** An apparatus according to Claim 6, further comprising a display configured to display an image corresponding to the first, coarse scaling coarse scaled image matrix in an analog form.

15. **(Currently Amended)** A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs displaying an image corresponding to the first, coarse scaling coarse scaled image matrix in an analog form.

16. **(Currently Amended)** A method according to Claim 1, further comprising selecting a value of the ratio $1/X$ for coarse scaling the original image matrix so as to reduce a memory requirement and a computational requirement when fine scaling the ~~intermediate~~ coarse scaled image matrix.

17. **(Previously Presented)** A method according to Claim 1, further comprising selecting X , Y and Z so that Y/Z is greater than or equal to $1/2$ and less than or equal to 1 .

18. **(Currently Amended)** A method according to Claim 1, further comprising:
receiving, at the first processor, the original image matrix;

coarse scaling the original image matrix by using the ratio $1/X$ to create pixels of the ~~intermediate~~ coarse scaled image matrix, and

sending, from the first processor to the second processor, the ~~intermediate~~ coarse scaled image matrix.

19. **(Currently Amended)** A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs selecting a value of the ratio $1/X$ for coarse scaling the original image matrix so as to reduce a memory requirement and a computational requirement when fine scaling the ~~intermediate~~ coarse scaled image matrix.

20. **(Previously Presented)** A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs selecting X , Y and Z so that Y/Z is greater than or equal to $1/2$ and less than or equal to 1.

21. **(New)** A method according to Claim 1, further comprising displaying an image corresponding to the coarse scaled image matrix.